

Amendments to the Specification:

Please replace paragraph [002] with the following amended paragraph:

[002] Balloon catheters are catheters with inflatable tips which ~~[[are]]~~ may be used to expand a partially closed or obstructed blood vessel. In such an application it is important that the catheter be as flexible as possible to allow it to travel in small blood vessels, but in prior art catheters the joint between the catheter shaft and the balloon neck tends to be relatively inflexible in the region of the welded joint.

Please replace paragraph [004] with the following amended paragraph:

[004] There are already known in the prior art processes for forming a joint or seam ~~[[in]]~~ between two regions of plastics material such as by heat-sealing two components of plastics materials.

Please replace paragraph [0030] with the following amended paragraph:

[0030] However, the present invention reduces this radial swelling by applying a tensile force, such as stretching, to the welded area. As shown in Figure 3, clamps (6) grip the balloon neck on either side of the weld zone and a tensile force is applied via the grip clamps (6). The force range is 0.75 - 1.5 pounds force (lbf) for a weld between a Nylon balloon and an inner shaft coextrusion of Polyethylene and PEBAX® polyether block amide copolymer by Ato Fina Chemicals, Inc. This tensile force causes the welded zone to stretch in a longitudinal direction and to shrink in a radial direction. When the polymer chains in the plastics material are heated, they relax and randomise. This results in a tendency to shrink in the direction of chain orientation and a tendency to swell in other directions. As a tensile force is applied to the region, the polymer chains reorientate in a longitudinal direction, which results in a reduction in thickness in the radial direction because the polymer chains rotate and move into a longitudinal orientation.